

### **Amendments to the Claims**

This listing of the claims replaces all prior versions and listings of the claims in the application.

### **Listing of Claims**

1. (Currently Amended) A method comprising:  
analyzing a plurality of database access statements that were issued for an application during the application's use to determine previous accessed items and types of access for the application; and  
developing a role for the application based on the previous accessed items and types of access for the application, wherein when the application is in use by a user, the developed role for the application allows the user database access.
2. (Previously Presented) The method of claim 1 wherein analyzing the issued database access statements comprises:  
capturing the plurality of database access statements;  
normalizing the captured database access statements; and  
eliminating redundancies in the normalized database access statements.
3. (Original) The method of claim 2 wherein the database access statements comprise Structured Query Language (SQL) queries.
4. (Previously Presented) The method of claim 1 wherein the previous accessed items and types of access include objects accessed and operations performed on the objects.

5. (Previously Presented) The method of claim 1 wherein developing a role comprises determining permissions for the application based on the previous accessed items and types of access.
6. (Original) The method of claim 1 further comprising determining which of a set of users are authorized to use the application.
7. (Previously Presented) The method of claim 1 further comprising:
  - detecting a user request to establish an application session;
  - finding the role for the application; and
  - assigning the role to a user.
8. (Original) The method of claim 7 wherein detecting a user request to establish an application session comprises determining if a user is authorized to use the application.
9. (Original) The method of claim 7 further comprising:
  - detecting an end of the application session; and
  - if an end of the application session is detected, disabling the assigned role for the user.

10. (Currently Amended) An article comprising a machine-readable medium storing instructions operable to cause one or more machines to perform operations comprising:

analyzing a plurality of database access statements that were issued for an application during the application's use to determine previous accessed items and types of access for the application; and

developing a role for the application based on the previous accessed items and types of access for the application, wherein when the application is in use by a user, the developed role for the application allows the user database access.

11. (Previously Presented) The article of claim 10, wherein analyzing the issued database access statements comprises:

determining whether the plurality of database access statements have been captured;  
normalizing the captured database access statements; and  
eliminating redundancies in the normalized database access statements.

12. (Previously Presented) The article of claim 10 wherein the previous accessed items and types of access include objects accessed and operations performed on the objects.

13. (Previously Presented) The article of claim 10 wherein developing a role comprises determining permissions for the application based on the previous accessed items and types of access.

14. (Original) The article of claim 10 wherein the instructions are further operable to cause one or more machines to perform operations comprising determining which of a set of users are authorized to use the application.

15. (Previously Presented) The article of claim 10 wherein the instructions are further operable to cause one or more machines to perform operations comprising:

determining whether a user request to establish an application session has been detected;  
finding the role for the application; and  
assigning the role to a user.

16. (Original) The article of claim 15 wherein detecting a user request to establish an application session comprises determining if a user is authorized to use the application.

17. (Original) The article of claim 15 wherein the instructions are further operable to cause one or more machines to perform operations comprising:

detecting an end of the application session; and  
if an end of the application session is detected, disabling the assigned role for the user.

18. (Currently Amended) A database security analyzer comprising:
- a communication interface operable to receive a plurality of database access statements that were issued for an application during the application's use;
  - a memory operable to store the issued database access statements; and
  - a processor operable to develop a role for the application based on the previously issued database access statements for the application, wherein when the application is in use by a user, the developed role for the application allows a user database access.
19. (Previously Presented) The analyzer of claim 18 wherein developing a role comprises:
- analyzing the database access statements to determine previous accessed items and types of access for the application;
  - determining permissions for the application based on the previous accessed items and types of access for the application; and
  - developing a role associated with the application based on the determined permissions.
20. (Previously Presented) The analyzer of claim 19 wherein the previous accessed items and types of access include objects accessed and operations performed on the objects.
21. (Previously Presented) The analyzer of claim 18 wherein developing a role comprises:
- determining whether the received database access statements have been captured;
  - normalizing the captured database access statements; and
  - eliminating redundancies in the normalized database access statements.
22. (Original) The analyzer of claim 18 wherein the memory comprises instructions, and the processor operates according to the instructions.

23. (CurrentlyAmended) A method comprising:

capturing a plurality of database access statements that were issued for one or more applications during the application's use, wherein the database access statements comprise Structured Query Language (SQL) queries;

normalizing the captured database access statements;

eliminating redundancies in the normalized database access statements;

analyzing the normalized database access statements to determine previous accessed items and types of access for an application, wherein the previous accessed items and types of access include objects accessed and operations performed on the objects;

determining permissions for the application based on the previous accessed items and types of access for the application;

developing a role for the application based on the determined permissions;

determining which of a set of users are authorized to use the application;

detecting a user request to establish a session of the application;

determining if the user is authorized to use the application;

if the user is authorized to use the application, finding the role for the application;

assigning the role to the user;

detecting an end of the application session; and

if an end of the application session is detected, disabling the assigned role for the user.